Before the
Federal Communications Commission
Washington, D.C. 20554

IN THE MATTER OF	)	
	)	
Unbundled Access to Network Elements	)	**WC Docket No. 04-313**
	)	
	)	**CC Docket No. 01-338**
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	

INITIAL COMMENTS OF THE PUBLIC SERVICE COMMISSION OF THE STATE OF WEST VIRGINIA

The Public Service Commission of the State of West Virginia (hereinafter referred to as the PSCWV) respectfully submits its initial comments and evidence in response to the August 20, 2004 released *Order and Notice of Proposed Rulemaking (Interim Order and NPRM),* FCC 04-179, 69 Federal Register 55128 (September 13, 2004) seeking input on a variety of issues related to the development of final network unbundled rules.

The PSCWV notes that it has included a summary of the pleading and evidence presented in its state proceeding as appendices to these comments.

WEST VIRGINIA PUBLIC SERVICE COMMISSION

TRIENNIAL REVIEW PROCEEDING:

SUMMARY OF EVIDENCE AND ARGUMENTS OF THE PARTIES

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COMMENTS OF THE
WEST VIRGINIA PUBLIC SERVICE COMMISSION
TRIENNIAL REVIEW PROCEEDING:
SUMMARY OF EVIDENCE AND ARGUMENTS OF THE PARTIES

Executive Summary

On March 1, 2004, the PSCWV issued an Order in this matter. The Order reiterated the facts and recommendations made by the Collaborative in its second report and recommendation dated January 16, 2004, discussed *supra*. The PSCWV ordered that any challenge to the FCC's impairment determinations in the *Triennial Review Order* filed after October 2, 2003, will be resolved by a date that is 9 months from the date such challenge is filed. Further the PSCWV ordered that consideration of issues related to implementation of a batch hot cut process, including pricing and performance metrics and remedies, is hereby deferred until such time as other jurisdictions in Verizon's operating area or elsewhere have concluded similar proceedings. The PSCWV ordered that the FCC's definition of the activities that constitute routine network modifications, as set forth in ¶¶ 632, 634 & 636-37 of the *Triennial Review Order*, is hereby adopted. The PSCWV ordered that the parties may seek changes or additions to the FCC's list of routine network modifications through arbitration proceedings brought pursuant to 47 U.S.C. § 252, formal complaint proceedings under *W. Va. Code* § 24-2-7, or proceedings in which declaratory relief is sought. Additionally the PSCWV ordered that upon receipt of filings seeking PSCWV determination of issues related to pricing of routine network modifications, the PSCWV will determine the

appropriate proceeding or forum for addressing the issues. The PSCWV ordered that the Collaborative continue to assist the PSCWV on an informal basis in complying with the requirements of the *Triennial Review Order*. The Collaborative shall monitor developments related to implementation of batch hot cut processes in other jurisdictions and communicate such developments informally among Collaborative membership. At an appropriate time, the Collaborative shall submit necessary filings to commence a proceeding regarding implementation of a batch hot cut process in West Virginia. Finally, the PSCWV ordered the case dismissed as resolved.

Summary of Proceedings before the PSCWV

On September 12, 2004, the Consumer Advocate Division (hereinafter referred to as CAD) filed a Petition to initiate a general investigation regarding the implementation of the unbundling requirements set forth in the Federal Communications Commission (hereinafter referred to as FCC) "Report and Order," *I/M/O Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers,* CC Docket 01-338, FCC 03-36 (Rel. Aug. 21, 2003)(*Triennial Review Order)* before the Public Service Commission of West Virginia. CAD stated that the Triennial Review Order required state commissions to act to implement new unbundling requirements set forth in that order. CAD asserted that based on the foregoing, the PSCWV must address the following issues: Enterprise: dark fiber, DS-3 circuits per DS-1 loops, dark fiber DS-3 and DS-1 facilities, shared transport, local circuit

switching, Enterprise: DS-1 & higher loops, mass market, signaling networks, call-related databases (excluding 911/E911), and EELs. CAD expounded that some of the foregoing issues will not be addressed by the PSCWV unless a carrier wishes to challenge the FCC's impairment decisions. CAD indicates that regardless if any incumbent local exchange carrier (hereinafter referred to as ILEC) or competitive local exchange carrier (hereinafter referred to as CLEC) wishes to challenge any of the impairment findings, the PSCWV will still need to address to major areas of concern: 1) the establishment of batch hot-cut process for mass market local switching, something required if the FCC's impairment finding stands and 2) implementation of the FCC's rejection of ILECs' "no facilities, no build" policies. CAD concluded that the PSCWV should adopt a number procedures for implementing its obligations under the Triennial Review Order including the establishment of a Triennial Review Order Collaborative (hereinafter referred to as the Collaborative) consisting of the state's ILECs, CLECs, PSCWV Staff, and CAD. CAD indicated that the collaborative should establish recommendations where ILECs may challenge the FCC's impairment findings, establish a procedure the PSCWV should adopt in establishing a batch-hot cut proceeding, adopt recommendations that the PSCWV should adopt to establish a procedure regarding "no facilities, no build," and identify any other issues that should be addressed by the Collaborative in conjunction with the duties delegated to the PSCWV by the FCC.

On September 18, 2004, PSCWV Staff issued an initial joint staff memorandum. The Staff stated that the PSCWV should assign CAD the duties of chairing the Collaborative,

as its petition initiated the PSCWV case. Staff concluded that it would actively participate in the Collaborative and would file recommendations when appropriate.

On September 24, 2004, the PSCWV issued an Order addressing the Petition filed by CAD. The PSCWV found it reasonable and justified to initiate a general investigation in this matter, which was styled as Commission Case No. 03-1507-T-GI. The PSCWV Order reiterated the facts and recommendations raised in CAD's petition, discussed *supra*. The PSCWV found that it was reasonable to establish the Collaborative to address the issues raised by CAD. Specifically, the PSCWV directed that the Collaborative shall address and make recommendations regarding: the procedure whereby ILECs may challenge the FCC's impairment decisions that were delegated to state commissions, as well as the procedural schedule for addressing the issues relevant to such impairment analyses; establish recommendations regarding the procedure the PSCWV should adopt in addressing the batch hot-cut process for mass market local circuit switching contemplated by the FCC, establish recommendations regarding the procedure the PSCWV should adopt in addressing the FCC's decision invalidating the "no facilities, no build" policy employed by Verizon-WV and similar policies employed by any other ILECs in the state, and identify any other issues that should be addressed by the Collaborative in conjunction with the duties delegated to the PSCWV by the FCC, and propose a procedural schedule for addressing such issues.

On October 29, 2003, the CAD filed the initial report and recommendations of the triennial review order implementation collaborative. The report addressed the "no

impairment" determination for enterprise local circuit switching for DS-1 and higher capacity facilities and whether any CLEC intended to file a petition seeking to rebut the FCC's impairment determination. The Collaborative determined that a recommendation should be made to the PSCWV to enter an order adopting the FCC's determination that CLECs are not impaired if they do not have access to ILEC's enterprise local circuit switching for DS-1 and higher capacity facilities. Verizon objected to this recommendation and noted that the Collaborative should state that no action needed to be taken regarding the FCC's no impairment determination at this time.

Frontier Communications and Verizon, indicated at the first meeting of the Collaborative that they did not intend to challenge the FCC's national impairment determination. Since no other ILEC was present at the meeting, the Collaborative recommended that the ILECs should be given fifteen (15) days to initiate a proceeding to rebut the FCC's impairment determination. If the ILECs failed to file a petition, then the Collaborative urged the PSCWV to issue an Order adopting the FCC's presumption that CLECs are impaired without access to mass market local circuit switching, enterprise high capacity loops and certain dedicated transport facilities. Subsequently the Collaborative recommended that the PSCWV adopt this presumption, noting that it does not affect the Section 251(f)(1) exemptions applicable to other rural ILECs. Verizon and AT&T dissented to this recommendation and stated that the Collaborative instead should recommend that the PSCWV "may find that it need not act at this time," rather than making any specific findings

of fact regarding impairment.

Regarding the batch hot-cut process and "no facilities, no build", members of the Collaborative indicated that each member would submit position papers to the Collaborative chair on the issue.

On December 15, 2003, the PSCWV issued an Order. The Order detailed the initial report of the Collaborative, discussed *supra*. The PSCWV determined that the FCC's finding for mass market local circuit switching, enterprise high capacity loops and dedicated transport for certain facilities in areas served by Verizon and Frontier does not affect rural ILECs exempt pursuant to Section 251(f)(1) of the Communications Act of 1934. Further, the PSCWV ordered any rural ILEC intending to challenge the FCC's impairment determination for mass market local circuit switching, enterprise high capacity loops and dedicated transport for certain facilities must do so within fifteen (15) days of this order. The PSCWV ordered the Collaborative to continue to conduct meetings to discuss the remaining issues and file a further report within thirty (30) days of this order.

On December 19, 2003, the Collaborative filed a petition seeking corrections to the PSCWV's December 15, 2003, Order. The Collaborative stated that a sentence in the order referred to a July 2, 2004 deadline for action on the FCC's network modifications rulings; however, there was no such deadline and this language referring to this July 2, 2004, deadline should be deleted in its entirety. Further, the Collaborative noted that the recommendation by the PSCWV that rural ILECs notify the PSCWV within fifteen (15)

days of the order of whether or not they intend to challenge the FCC's impairment determinations for various network elements in the Verizon and Frontier service area should also be deleted as it is unnecessary given the determination that rural ILECs are exempt pursuant to Section 251 (f)(1).

On January 2, 2004, the PSCWV entered a Corrective Order. The Order reiterated the requested corrections detailed by the Collaborative in its Petition dated December 19, 2003, discussed *supra*. The PSCWV ordered that the reference to the July 2, 2004 deadline in the December 15, 2003 Order be deleted. Further, the PSCWV directed that the rural ILECs intending to challenge the FCC's impairment determination in regards to mass market local circuit switching, enterprise high capacity loops and dedicated transport for certain facilities should file a notice within five (5) days of the date of this order.

On January 16, 2004, the Collaborative filed its second report and recommendations. The Collaborative stated that the PSCWV should issue a final order in this matter, which directs the following: providing that any challenge to the FCC's impairment determinations in the Triennial Review Order filed after October 2, 2003, shall be resolved by the date that is 9 months from the date of filing of such challenge; deferring consideration of issues related to implementation of a batch hot cut process, including pricing and performance metrics and remedies, until such time as other jurisdictions in Verizon's operating area or elsewhere have concluded similar proceedings; and adopting the FCC's definition of the activities that constitute routine network modifications, as set forth in ¶¶632, 634 & 636-37

of the Triennial Review Order. PSCWV should issue an order to provide the additions or changes to the FCC's list of routine network modifications can be sought through any appropriate PSCWV proceeding, such as arbitration proceedings brought pursuant to 47 U.S.C. § 252, formal complaint proceedings under *W. Va. Code* § 24-2-7, or proceedings in which declaratory relief is sought, providing that issues related to pricing of routine network modifications shall be addressed in an appropriate, separate proceeding, continuing the Collaborative, on an informal basis. The Collaborative will assist the PSCWV in complying with the requirements of the Triennial Review Order, including: directing that the Collaborative continue to monitor developments related to implementation of batch hot cut processes in other jurisdictions and communicate such developments informally among Collaborative membership, directing that the Collaborative submit such further filings as are necessary in order to commence a proceeding regarding implementation of a batch hot cut process in West Virginia at an appropriate time and dismissing, as resolved, this general investigation.

On March 1, 2004, the PSCWV issued an Order in this matter. The Order reiterated the facts and recommendations made by the Collaborative in its second report and recommendation dated January 16, 2004, discussed *supra*. The PSCWV ordered that any challenge to the FCC's impairment determinations in the *Triennial Review Order* filed after October 2, 2003, will be resolved by a date that is 9 months from the date such challenge is filed. Further the PSCWV ordered that consideration of issues related to implementation of

a batch hot cut process, including pricing and performance metrics and remedies, is hereby deferred until such time as other jurisdictions in Verizon's operating area or elsewhere have concluded similar proceedings. The PSCWV ordered that the FCC's definition of the activities that constitute routine network modifications, as set forth in ¶¶ 632, 634 & 636-37 of the *Triennial Review Order*, is hereby adopted. The PSCWV ordered that the parties may seek changes or additions to the FCC's list of routine network modifications through arbitration proceedings brought pursuant to 47 U.S.C. § 252, formal complaint proceedings under *W. Va. Code* §24-2-7, or proceedings in which declaratory relief is sought. Additionally the PSCWV ordered that upon receipt of filings seeking PSCWV determination of issues related to pricing of routine network modifications, the PSCWV will determine the appropriate proceeding or forum for addressing the issues. The PSCWV ordered that the Collaborative continue to assist the PSCWV on an informal basis in complying with the requirements of the *Triennial Review Order*. The Collaborative shall monitor developments related to implementation of batch hot cut processes in other jurisdictions and communicate such developments informally among Collaborative membership. At an appropriate time, the Collaborative shall submit necessary filings to commence a proceeding regarding implementation of a batch hot cut process in West Virginia. Finally, the PSCWV ordered the case dismissed as resolved.

CONSUMER ADVOCATE DIVISION
STATE OF WEST VIRGINIA
PUBLIC SERVICE COMMISSION
700 Union Building
723 Kanawha Boulevard, East
Charleston, West Virginia 25301
(304) 558-0526

September 12, 2003

Sandra Squire
Executive Secretary
Public Service Commission of West Virginia
201 Brooks Street
Charleston, West Virginia 25301

RE: CASE NO. 03-1502-T-PC, GENERAL INVESTIGATION REGARDING IMPLEMENTATION OF THE FEDERAL COMMUNICATIONS COMMISSION'S UNBUNDLING REQUIREMENTS IN ITS *TRIENNIAL REVIEW ORDER*

Dear Ms. Squire:

Enclosed is an original and 6 copies of the Consumer Advocate Division's "*Petition to Initiate a General Investigation*" for filing in this matter.

Very truly yours,

PATRICK W. PEARLMAN
WV State Bar No. 5575

PWP/s
Enclosure

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON

CASE NO. 03-_____-T-PC

GENERAL INVESTIGATION REGARDING
IMPLEMENTATION OF THE FEDERAL
COMMUNICATIONS COMMISSION'S
UNBUNDLING REQUIREMENTS IN ITS
TRIENNIAL REVIEW ORDER

CONSUMER ADVOCATE DIVISION'S PETITION TO INITIATE A GENERAL INVESTIGATION

Pursuant to Rule 6.3.a. of the Commission's Rules of Practice and Procedure and W. Va. Code § 24-1-1(f)(2), the Consumer Advocate Division ("CAD") of the West Virginia Public Service Commission ("Commission"), by undersigned counsel, hereby petitions the Commission to initiate a general investigation regarding implementation of the unbundling requirements set forth in the Federal Communications Commission's ("FCC") "Report and Order," *I/M/O Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket 01-338, FCC 03-36 (Rel. Aug. 21, 2003) ("*Triennial Review Order*"). In support of its petition, CAD states as follows:

I. STATUTORY AND REGULATORY BACKGROUND.

1. Section 251(c)(3) of the Communications Act of 1934, as amended ("Act")requires incumbent local exchange carriers ("ILECs") to provide:

> [T]o any requesting telecommunications carrier . . . nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of [an interconnection] agreement and the requirements of [Section 251] and section 252 [of the Act].

47 U.S.C. § 251(c)(3).

2. The Act defines "network element" as a "facility or equipment used in the provision of a telecommunications service," including:

> [F]eatures, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provisions of a telecommunications service.

47 U.S.C. § 153(29).

3. Section 251(d)(2) of the Act establishes the general standard that the FCC must use in determining those unbundled network elements ("UNEs") that ILECs must make available to competitors. This section of the Act provides that:

> In determining what network elements should be made available for purposes of subsection (c)(3), the [FCC] shall consider, at a minimum, whether – (A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

47 U.S.C. § 251(d)(2).

4. Under the Act, state commissions are authorized to review and arbitrate interconnection agreements for compliance with the requirements of Sections 251 and 252 of the Act, as well as the FCC's implementing rules. *See, generally*, 47 U.S.C. § 252. In addition, Section 251(d)(3) of the Act preserves states' independent state law authority to address unbundling issues to the extent that the exercise of such authority does not conflict with federal law. 47 U.S.C. § 251(d)(3).

5. The FCC established rules implementing the Act's unbundling and

other requirements in August 1996. *See* "First Report and Order," *I/M/O Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 96-325 (Rel. Aug. 8, 1996) (*Local Competition 1st R&O*).

6. Among other things, the rules adopted by the FCC in the *Local Competition 1st R&O* interpreted the Act's "necessary" and "impair" standards governing ILECs' unbundling obligations, established a minimum set of UNEs that ILECs must provide, and established a Total Element Long-Run Incremental Cost ("TELRIC") methodology for states to use in setting costs for UNEs.

7. The FCC's decisions in the *Local Competition 1st R&O* have been the source of numerous appeals and seemingly endless further FCC rulings since the 1996 order's release.[1]

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[1] *See, e.g., Iowa Utilities Board v. F.C.C.*, 120 F.3d 753 (8th Cir. 1997), *rev'd in part, aff'd in part, vacated and remanded sub nom. AT&T v. Iowa Utilities Board*, 525 U.S. 366 (1998). Among other things, the U.S. Supreme Court vacated the FCC's interpretation of the "necessary" and "impair" standards governing ILECs' unbundling obligations. In response, the FCC issued an order more narrowly interpreting the "necessary" and "impair" standards set forth in the Act and modifying the list of UNEs ILECs are required to provide. *See* "Third Report and Order," *I/M/O Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, FCC 99-238 (Rel. Nov. 5, 1999) ("*UNE Remand Order*"). Subsequently, the FCC modified the *UNE Remand Order* to limit the availability of so-called "enhanced extended links" ("EELs") used by CLECs to originate and terminate long distance services. *See* "Supplemental Order," *I/M/O Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 99-370 (Rel. Nov. 24, 1999) ("*UNE Supplemental Order*"). The restriction on the use of EELs adopted by the FCC was clarified and extended in a subsequent FCC order. *See* "Supplemental Order Clarification," *I/M/O Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, FCC 00-183 (Rel. July 2, 2000) ("*Supplemental Order Clarification*"), *aff'd sub nom. CompTel v. F.C.C.*, 309 F.3d 3 (D.C. Cir. 2002). In another, subsequent order, the FCC required ILECs to provide the high-frequency portion of the local loop ("HFPL") to requesting carriers as a UNE. *See* "Third Report and Order," *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 98-147, 96-98, FCC 99-355 (Rel. Dec. 9, 1999) ("*Line Sharing Order*").

Another round of litigation ensued, this time regarding the TELRIC standard adopted by the FCC. The Eighth Circuit vacated the FCC's TELRIC methodology, only to be reversed and the FCC's TELRIC methodology upheld by the U.S. Supreme Court. *See Iowa Utilities Board v. F.C.C.*, 219 F.3d 744 (8th Cir. 2000), *rev'd sub nom. Verizon v. F.C.C.*, 535 U.S. 467 (2002).

Less than two weeks after the Supreme Court's decision in *Verizon*, upholding the FCC's TELRIC

8. In the midst of these various proceedings, the FCC initiated its triennial review of virtually all aspects of the unbundling regime established by the FCC in its *Local Competition 1st R&O*. *See* "Notice of Proposed Rulemaking," *I/M/O Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, FCC 01-361 (Rel. Dec. 20, 2001) ("*Triennial Review NPRM*").

9. On February 20, 2003, the FCC issued a public notice advising that it had adopted rules based on the *Triennial Review NPRM*. The public notice provided a high-level summary of the major actions taken by the FCC in adopting these new rules. However, no order followed the public notice for months.

10. On August 21, 2003, the FCC finally released the *Triennial Review Order* previewed six months earlier.

II. SUMMARY OF THE *TRIENNIAL REVIEW ORDER*.

11. The *Triennial Review Order* attempts to refine the rules that determine what network elements must be unbundled by ILECs and the rules regarding how this analysis must be framed. The ultimate question to be determined in the analysis for each UNE is whether a competitor's market entry will be "impaired" if it does not have access to the particular UNE.

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methodology, the D.C. Circuit vacated those portions of the FCC's *UNE Remand Order* that interpreted the "impair" statutory standard and that established a list of UNEs that ILECs must provide to requesting carriers. *United States Telecom Association v. F.C.C.*, 290 F.3d 415 (D.C. Cir. 2002), *cert. denied*, 123 S.Ct. 1571 (2003) ("*USTA*"). The D.C. Circuit also vacated the FCC's *Line Sharing Order* that required ILECs to provide the HFPL as a UNE to requesting telecommunications carriers.

Not long after its decision in *USTA*, the D.C. Circuit upheld the FCC's interim restrictions on the availability of EELs for use in the provision of exchange access service. *Competitive Telecommunications Association v. F.C.C.*, 309 F.3d 8 (D.C. Cir. 2002) ("*CompTel*").

Definition of "impairment."

12. In the *Triennial Review Order*, the FCC reformulated the standard for determining whether a competitor's market entry is "impaired" if unable to access a particular UNE. The FCC concluded that a requesting carrier is impaired "when lack of access to an [ILEC] network element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic." *Triennial Review Order*, at ¶ 84. The question is whether the revenues a competitor expects to obtain from entering the market exceed the costs of entering and serving that market, factoring in all costs, including opportunity costs, and the risk of possible failure. *Id.*

13. The FCC identified a number of potential barriers to entry that must be considered: (a) prospective cost of capital; (b) economies of scale; (c) sunk costs; (d) first-mover advantages; (e) absolute cost advantages; and (f) technical or operational barriers that are solely or primarily within the ILEC's control. *Id.* at ¶¶ 87-91.

The standard of evidence to demonstrate impairment.

14. The FCC concluded that "actual marketplace evidence" of impairment is the most probative, particularly granular evidence that competitors are providing retail service using non-ILEC facilities. *Id.* at 93. However, the mere existence of facilities deployment by other competitors in a market is not dispositive; also to be considered is the extent of deployment of such facilities, the submarket served, the relevant market's maturity and stability, and other

practical considerations (*e.g.*, cost, quality, quantity, maturity). *Id.* at ¶ 94.

15. The FCC indicated that "intermodal competition" – competition from other types of providers, such as cable, satellite or wireless – is also probative evidence of "impairment," but is not dispositive. *Id.* at ¶¶ 97-98. The FCC concluded that whether the technology offered by such providers contributes to a wholesale market for the UNEs sought should be considered when technology offered via intermodal competition is limited in availability to only a few carriers. *Id.* at ¶ 98.

16. In its order, the FCC indicated that it will not consider, as relevant to its impairment analysis, the availability and requesting carriers' use of ILECs' tariffed services, or the fact that a UNE is used to provide an ILEC service that is subject to competition, or the fact that an ILEC has received pricing flexibility in a given market. *Id.* at ¶¶ 102-04.

The "granularity" of evidence and of markets.

17. In its *Triennial Review Order*, the FCC indicated that any approach to unbundling must be "granular" – *i.e.*, the analysis must consider market-specific variations. *Id.* at ¶ 118. The FCC indicated that it will consider customer class, geography, service, and types and capacities of facilities. *Id.*

18. With regard to customer class distinctions, the FCC indicated that it henceforth will distinguish between three classes of customers: (1) mass market (residential and very small business) customers; (2) small and medium enterprise (business) customers; and (3) large enterprise (business) customers. *Triennial*

Review Order, at ¶ 123. The FCC attempted to further define these three customer classes. *Id.* at ¶¶ 124-29.

19. With regard to geographic variations, the FCC concluded that – at least for some network elements – it cannot legally support a national finding on impairment generally, and therefore impairment should be determined on a market-by-market basis. Accordingly, the FCC delegated responsibility to the states for this analysis. *Id.* at ¶ 130. For some network elements, the FCC concluded that the record before it permitted a nationwide finding whether a particular network element should be unbundled. *Id.*

The element is used to compete against "qualifying service."

20. In order for an ILEC to be required to unbundle any network element, requesting carriers must seek to use such element in order to compete against a "qualifying service" offered by the ILEC. *Id.* at ¶ 133. The FCC indicated that a "qualifying service" is one that has traditionally been the exclusive domain of an ILEC. *Id.* at ¶ 135. Such services include: (1) local exchange voice and data services, (2) digital subscriber line ("DSL") services; and (3) high-capacity access services provided on a common carrier basis. *Id.* at¶¶ 135 & 140. Once a requesting carrier obtains a UNE to provide a qualifying service, that element may be used to provide any other service, including information service. *Id.* at ¶ 143.

III. UNBUNDLING REQUIREMENTS FOR INDIVIDUAL NETWORK ELEMENTS.

A. Loops – Including Line Sharing.

21. In the *Triennial Review Order*, the FCC conducted separate analyses

of impairment based on: (1) loop types – copper, fiber or hybrid (copper/fiber); (2) capacity levels – OCn loops,[2] dark fiber[3] loops, DS-3 loops, and DS-1 loops;[4] and (3) customer classes – mass market, small enterprise, and large enterprise. *Triennial Review Order*, at ¶ 197. Generally speaking, the FCC required extensive unbundling of legacy copper loop facilities and more limited unbundling of next-generation, fiber-based networks.

(1) Mass market loops.

22. **Copper loops.** The FCC concluded that ILECs must unbundle stand-alone copper loops and subloops, whether existing or newly deployed, for the provision of either or both narrowband and broadband service, including copper loops conditioned to provide xDSL service. *Id.* at ¶¶ 211, 248-49 & 253-54.

23. The FCC also concluded that ILECs must permit "line splitting" on such loops. Line splitting allows one competitor to provide narrowband service while another provides broadband service over the same loop. *Id.* at ¶¶ 211, 251-

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[2]OCn refers to "Optical Carrier," an optical interface designed to work with the synchronous transport signal ("STS") rate in a synchronous optical network ("SONET). "N" = 1, 3, 9, 12, 18, 24, 26, 48, 192 or 256. An OC-3, for example, is a SONET channel equal to three DS-3s (equal to 155.52 million bits per second ("Mbps") capacity). *Newton's Telecom Dictionary*, 605 (2000 Ed.).

[3]"Dark fiber" is optical fiber through which no light is transmitted and through which no signal is carried. It is unactivated, deployed fiber that is left dark, i.e., with no necessary equipment (such as opto-electronics or optronics) attached to light the fiber to carry a signal to serve customers. *Triennial Review Order*, at ¶ 201 n. 628, *citing Newton's Telecom Dictionary*, 201 (2002 Ed.).

[4]DSn refers to "Digital Signal (level)." The terms refer to a hierarchy of digital signal speeds used to classify capacities of digital lines and trunks. A DS0 is the worldwide standard speed for digitizing one voice conversation; it has a standard speed (capacity) of 64,000 bits per second (*i.e.*, 64 Kbps). A DS-1 can carry 24 DS-0s, and has a capacity of 1.544 million bits per second (*i.e.*, 1.544 Mbps). A DS-3 can carry 3 DS-1s, and has a capacity of 454.736 Mbps. The highest DSn level is DS-4, which can carry 168 DS-1s, and has a capacity of 274.176 Mbps. *Newton's Telecom Dictionary*, 281 (2000 Ed.).

52.

24. Subject to a three-year transition period, and a new grandfathering provision, ILECs are no longer required to provide "line sharing" on copper, mass market loops. *Triennial Review Order*, at ¶ 255. Line sharing allows the high frequency portion of the loop ("HFPL") to be separately unbundled for the provision of broadband service. The FCC also declined to require unbundling of the low frequency portion of the loop. *Id.* at ¶ 270. New line sharing arrangements are subject to the three-year transition provisions established by the FCC. *Id.* at ¶¶ 264-65.

25. **Hybrid copper/fiber loops**. ILECs generally must unbundle the copper distribution portion of the loop, but need not unbundle the fiber feeder portion of the loop, to the extent that this portion is used to provide packetized service. *Id.* at ¶¶ 288-89.

26. **Fiber-to-the-home ("FTTH") loops**. ILECs are generally not required to unbundle FTTH loops subject to one exception. Where an ILEC retires old copper loops and overbuilds those facilities with FTTH, the ILEC must unbundle access to a 64 Kbps transmission path for the provision of narrowband (*i.e.*, voice) service to that customer. *Id.* at ¶¶ 274, 276.

(2) Enterprise Market Loops.

27. **OCn loops**. The FCC concluded that no impairment exists, on a nationwide basis, for this network element and thus, ILECs are not required to unbundle this element. *Id.* at ¶¶ 202, 315.

28. **Dark fiber loops**. The FCC found impairment on a location-by-location basis and delegated to state commissions the authority to make impairment findings based upon a "self-provisioning trigger" (*i.e.*, whether competitors self-deploy dark fiber at each location). *Id.* at ¶¶ 311, 314.

29. The "self-provisioning trigger" is met where a specific customer location is being served by two or more competitors who are unaffiliated with either each other, or the ILEC. The competitors must also use their own facilities, not facilities owned or controlled by the ILEC or the other competitor. *Triennial Review Order*, at ¶ 332.

30. **DS-3 loops**. The FCC found impairment on a location-by-location basis and delegated to state commissions the authority to make impairment findings based upon the above-described "self-provisioning trigger" and a "competitive wholesale facilities trigger." *Id.* at ¶¶ 202, 320-21.

31. The "competitive wholesale facilities trigger" is met where two or more unaffiliated competitors, unaffiliated with the ILEC, are offering alternative loop facilities to other competitors on a wholesale basis at the same capacity level. *Id.* at ¶ 337.

32. The FCC limited an ILEC's unbundling obligation to a total of two DS-3s per CLEC to any single customer location, on the grounds that three DS-3s circuits are equivalent to one OC-3, and OCn loops are conclusively not impaired. *Id.* at 324.

33. **DS-1 loops**. The FCC concluded that such loops are generally

impaired and directed state commissions to make location-specific impairment determinations applying the "competitive wholesale facilities trigger." *Id.* at ¶¶ 202, 325-27.

Timing for state commission impairment determinations.

34. The FCC directed that state commissions complete their initial impairment reviews for enterprise dark fiber, DS-3 and DS-1 loops within nine months from October 2, 2003 (the effective date of the *Triennial Review Order*) – in other words, by July 2, 2004. *Id.* at ¶¶ 339, 830.

B. Local Circuit Switching.

35. In its *Triennial Review Order*, the FCC defined the local circuit switching element to encompass line-side and trunk-side facilities, plus the features, functions and capabilities of the switch, including the basic capabilities that are available to the ILEC's customers, such as telephone number, directory listing, dial tone, signaling, access to 911 and access to switch routing tables. *Triennial Review Order*, at ¶ 433. The end office switching element includes all vertical features that the switch is capable of providing, including custom calling, CLASS features and Centrex service. *Id.*

(1) Mass Market Local Circuit Switching.

36. The FCC concluded that CLECs are impaired, on a nationwide basis, if denied access to local circuit switching in the provision of service to mass market customers. *Id.* at ¶¶ 419, 459. The FCC cited evidence of economic and operational barriers caused by the "hot cut" process (*i.e.*, the labor-intensive,

coordinated transfer of a customer's line from the ILEC's switch to the CLEC's switch) in support of its finding. *Id.* at ¶¶ 465-475.

36. The FCC directed state commissions to assess impairment in the mass market for local circuit switching on a market-by-market basis and required states to use a granular definition of market in their analysis, taking into consideration CLEC customer locations and factors affecting competitors' ability to target each group of customers economically and efficiently. *Id.* at ¶¶ 486, 493-97.

37. In connection with their impairment analysis, state commissions are prohibited from defining the market to include the entire state. *Id.* at ¶ 495.

38. The FCC authorized state commissions to define mass market customers from enterprise customers, but where the previous switching "carve-out" was applicable (*i.e.*, density zone 1 of the top 50 metropolitan statistical areas ("MSAs")),[5] the FCC indicated that the appropriate cut-off in separating mass market customers from enterprise customers will be four DS-0 lines, absent significant evidence to the contrary. *Id.* at ¶ 497.

39. In order to find that there is no impairment for local circuit switching, the FCC required state commissions to find either of two triggers met: (1) the self-provisioning trigger (*i.e.*, three or more carriers, unaffiliated with the ILEC or each other, serving mass market customers in a particular market using self-

[5]The FCC previously determined that ILECs that make EELs available are not obligated to provide unbundled local circuit switching to requesting carriers for serving customers with four or more DS-0 loops in such areas. *UNE Remand Order*, at ¶¶ 276-98.